Electronic Version
Stylesheet Version v1.1.1

Method and apparatus for scanning a specimen using an optical imaging system

Abstract

The invention is based on an apparatus and a method for scanning specimens (1) using an optical imaging system (3) and a scanning stage (2), images of the specimen (1) being acquired by means of a camera (4), and/or measurements on the specimen (1) being made by means of an optical measurement device (5), at specimen points X_p, Y_p. For that purpose, the scanning stage (2) is calibrated by obtaining and storing height values Z at different calibration positions X, Y of the scanning stage (2), and thereby generating a running height profile of the scanning stage (2). For the scanning of specimens (1), the specimen height positions Z_p at specimen points X_p, Y_p are determined by means of a reference height Z_{ref} of the specimen (1) together with the running height profile of the scanning stage (2). While each specimen point X_p, Y_p is being traveled to with the scanning stage (2) the relevant specimen height position Z_p is already being set, so that running errors of the scanning stage (2) are compensated for and image acquisi-

tions or measurements are possible immediately upon reaching the specimen point X_p, Y_p.